UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/637,174	08/07/2003	Petre Dini	50325-0780	2931

29989 7590 05/28/2008
HICKMAN PALERMO TRUONG & BECKER, LLP
2055 GATEWAY PLACE
SUITE 550
SAN JOSE, CA 95110

EXAMINER	
PATEL, HARESH N	

ART UNIT	PAPER NUMBER
2154	

MAIL DATE	DELIVERY MODE
05/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/637,174	DINI ET AL.	
	Examiner	Art Unit	
	Haresh N. Patel	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10,15-25,27-36,38 and 43-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10,15-25,27-36,38,43-51,53-56 and 58* is/are rejected.

7)☒ Claim(s) *52 and 57* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-8,10,15-25,27-36,38 and 43-58 are subject to examination. New claims 52 and 57 are allowable but objected to.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8,10,15-25,27-36,38 and 43-51, 53-56, 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Chaar et al. 6,857,020 (Hereinafter Chaar-IBM).

4. Referring to claim 1, Chaar-IBM discloses a method for capturing behavior for network components and for interactions between components comprising: accessing first data that defines one or more states and state transitions for a particular component or interaction between a particular two or more components (e.g., figures 4, 6A, col., 6), wherein the first data defines at least one composite state transition, each of said composite state transition comprising multiple state transitions (e.g., col., 9); and in response to the particular component or interaction between the particular two or more components entering a particular state or state transition (e.g., col., 9), generating a notification corresponding to the particular state or state transition, wherein the

particular state or state transition is one of the one or more states and state transitions (e.g., col., 11).

5. Referring to claim 2, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the one or more states are specified based on thresholds (e.g., col., 7).

6. Referring to claim 3, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the notification is an event (e.g., col., 9).

7. Referring to claim 4, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the particular component or interaction between the particular two or more components is a component (e.g., col., 10), and wherein the step of generating the notification comprises generating the notification by the component (e.g., col., 10).

8. Referring to claim 5, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the particular component or interaction between the particular two or more components is an interaction between the particular two or more components (e.g., col., 10), and wherein the notification is generated by at least one of the particular two or more components (e.g., col., 10).

9. Referring to claim 6, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses reporting the notification to a network management system (e.g., col., 6).

10. Referring to claim 7, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses detecting that the particular component or interaction between the particular two or more components has entered the particular state or state transition (e.g., col., 9); and wherein said notification is generated in response to said step of detecting (e.g., col., 9).

11. Referring to claim 8, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein, the step of detecting is performed by an agent, said agent being different than the particular component (e.g., col., 11).

12. Referring to claim 10, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses polling the particular component or the particular two or more components to determine that the particular state or state transition has occurred (e.g., col., 12).

13. Referring to claim 15, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the set of one or more illegal states or state transitions comprises a state associated with an authorization violation or an authentication forgery (e.g., col., 9).

14. Referring to claim 16, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the set of one or more undesirable states or state transitions comprises a state associated with a sudden quality of service degradation or a violation of a service level agreement (e.g., col., 10).

15. Referring to claim 17, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses examining multiple notifications to deduce one or more trends regarding the network (e.g., col., 9).

16. Referring to claim 18, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the step of examining multiple notifications comprises examining notifications for stable-behavior in a threshold value for a particular trend (e.g. col., 11).

17. Referring to claim 19, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the step of examining multiple notifications comprises examining notifications for increases or decreases in a threshold value for a particular trend (e.g., col., 11).

18. Referring to claim 20, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses computer-based system for capturing behavior for network components and for interactions between components (e.g., col., 6), the system comprising: one

or more network components, each network component configured to spontaneously generate notifications when specified states and state transitions occur involving the network component (e.g., col., 9), wherein the specified state and state transitions include one or more composite state transitions, each of said composite state transition comprising multiple state transitions (e.g., col., 11) and a network management system configured to receive said spontaneously generated notifications (e.g., col., 11).

19. Referring to claim 21, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses an agent configured to detect the generation of notifications by the network components, and configured to report detected notifications to said network management system (e.g., col., 10).

20. Referring to claim 22, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses a state table configured to store said specified states and state transitions, including composite state transitions (e.g., col., 11).

21. Referring to claim 23, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the state table is in a network management system (e.g., col., 7).

22. Referring to claim 24, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the state table is in one of the one or more network components (e.g., col., 10).

23. Referring to claim 25, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the agent is further configured to examine one or more conditions of one or more network components and to query the state table storing said specified states and state transitions to determine whether the one or more conditions represents an illegal or undesirable state or state transition (e.g., col., 11).

24. Referring to claim 27, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses a computer-based system for capturing illegal and undesired behavior for network components and for interactions between components (e.g., col., 6)comprising: one or more network components (e.g., col., 6); an agent configured to examine said network components to determine whether specified states or state transitions, including composite state transitions, have occurred (e.g., col., 9), wherein the agent is configured to generate notifications upon a determination that a specified state or state transition has occurred, wherein the agent is configured to report detected notifications to a network management system (e.g., col., 9); wherein each of said composite state transition comprises multiple state transitions; wherein the specified states and state transitions comprise (1) a set of undesirable states or state transitions associated with undesirable behavior (e.g., col., 11) and (2) a set of illegal states or state transitions associated with illegal behavior (e.g., col., 11), said set of illegal states and state

transitions being different than said set of undesirable states or state transitions (e.g., col., 11); and said network management system configured to receive reports of said generated notifications (e.g., col., 11).

25. Referring to claim 28, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses a state table configured to store said specified states and state transitions, including composite state transitions (e.g., col., 10).

26. Referring to claim 29, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses computer-readable storage medium carrying one or more sequences of instructions for capturing behavior for network components and for interactions between components (e.g., col., 6), which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of: accessing first data that defines one or more states and state transitions for a particular component or interaction between a particular two or more components (e.g., col., 6), wherein the first data defines at least one composite state transition, each of said composite state transition comprising multiple state transitions (e.g., col., 6)and in response to the particular component or interaction between the particular two or more components entering a particular state or state transition generating a notification corresponding to the particular state or state transition (e.g., col., 11), wherein the particular state or state transition is one of the one or more states and state transitions (e.g., col., 11).

27. Referring to claim 30, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the one or more states are specified based on thresholds (e.g., col., 9).

28. Referring to claim 31, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein said notifications are events (e.g., col., 10).

29. Referring to claim 32, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the particular component or interaction between the particular two or more components is a component (e.g., col., 11), and wherein the step of generating the notification comprises generating the notification by the component (e.g., col., 11).

30. Referring to claim 33, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the particular component or interaction between the particular two or more components is an interaction between the particular two or more components (e.g., col., 10), and wherein the notification is generated by at least one of the particular two or more components (e.g., col., 10).

31. Referring to claim 34, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of: reporting the notification to a network management system (e.g., col., 11).

32. Referring to claim 35, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the steps of: detecting that the particular component or interaction between the particular two or more components has entered the particular state or state transition (e.g., col., 10); and wherein said notification is generated in response to said step of detecting (e.g., col., 10).

33. Referring to claim 36, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the step of detecting is performed by an agent, said agent being different than the particular component (e.g., col., 9).

34. Referring to claim 38, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of: polling the particular component or the particular two or more components to determine that the particular state or state transition has occurred (e.g., col., 11).

35. Referring to claim 43, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the set of one or more illegal states or state transitions comprises a state associated with an authorization violation or an authentication forgery (e.g., col., 9).

36. Referring to claim 44, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the set of one or more undesirable states or state transitions comprises a state associated with a sudden quality of service degradation or a violation of a service level agreement (e.g., col., 10).

37. Referring to claim 45, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of examining multiple notifications to deduce one or more trends regarding the network (e.g., col., 9).

38. Referring to claim 46, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the step of examining multiple notifications comprises examining notifications for stable-behavior in a threshold value for a particular trend (e.g., col., 10).

39. Referring to claim 47, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the step of examining multiple notifications comprises examining notifications for increases or decreases in a threshold value for a particular trend (e.g., col.,. 10).

40. Referring to claims 48 and 54, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses accessing second data that indicates, for the particular component or interaction between the particular two or more components (e.g., col., 6), a set of one or more undesirable states or state transitions (e.g., col., 6); wherein each of said one or more undesirable states or state transitions is a state or state transition of the one or more states and state transitions that is associated with undesirable behavior (e.g., col., 7); and accessing third data that indicates, for the particular component or interaction between the particular two or more components, a set of one or more illegal states or state transitions (e.g., col., 7); wherein each of said one or more illegal states or state transitions is a state or state transition of the one or more states and state transitions that is associated with illegal behavior (e.g., col., 9); wherein the set of one or more illegal states is different from the set of one or more undesirable states (e.g., col., 9); wherein the particular state or state transition belongs to either the set of one or more undesirable states or state transitions or the set of one or more illegal states or state transitions (e.g., col., 9).

41. Referring to claim 49, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the specified states and state transitions comprise (1) a set of undesirable states or state transitions associated with undesirable behavior (e.g., col., 10) and (2) a set of illegal states or state transitions associated with illegal behavior, said set of illegal states and state transitions being different than said set of undesirable states or state transitions (e.g., col., 10).

42. Referring to claims 50 and 55, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the first data is stored in a state table in a network management system, wherein the step of generating is performed by a component or agent separate from the network management system (e.g., col., 10).

43. Referring to claims 51 and 56, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the first data is stored in a state table in the particular component or in at least one of the two or more particular components (e.g., col., 11).

44. Referring to claims 53 and 58, Chaar-IBM discloses the claimed limitations as rejected above. Chaar-IBM also discloses wherein the particular state or state transition is a composite state transition (e.g., col., 9).

45. Claims 1-8,10,15-25,27-36,38 and 43-51, 53-56, 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Bradley et al. 7,082,463 (Hereinafter Bradley-CICSO).

46. Referring to claim 1, Bradley-CICSO discloses a method for capturing behavior for network components and for interactions between components comprising: accessing first data that defines one or more states and state transitions for a particular component or interaction between a particular two or more components (e.g., col., 4), wherein the first data defines at least one composite state transition, each of said composite state transition comprising multiple state transitions (e.g., col., 5); and in response to the particular component or interaction between the particular two or more components entering a particular state or state transition (e.g., col., 5),

generating a notification corresponding to the particular state or state transition, wherein the particular state or state transition is one of the one or more states and state transitions (e.g., col., 9).

47. Referring to claim 2, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the one or more states are specified based on thresholds (e.g., col., 10).

48. Referring to claim 3, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the notification is an event (e.g., col., 5).

49. Referring to claim 4, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the particular component or interaction between the particular two or more components is a component (e.g., col., 10), and wherein the step of generating the notification comprises generating the notification by the component (e.g., col., 10).

50. Referring to claim 5, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the particular component or interaction between the particular two or more components is an interaction between the particular two or more components (e.g., col., 10), and wherein the notification is generated by at least one of the particular two or more components (e.g., col., 10).

51. Referring to claim 6, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses reporting the notification to a network management system (e.g., col., 4).

52. Referring to claim 7, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses detecting that the particular component or interaction between the particular two or more components has entered the particular state or state transition (e.g., col., 5); and wherein said notification is generated in response to said step of detecting (e.g., col., 5).

53. Referring to claim 8, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein, the step of detecting is performed by an agent, said agent being different than the particular component (e.g., col., 9).

54. Referring to claim 10, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses polling the particular component or the particular two or more components to determine that the particular state or state transition has occurred (e.g., col., 12).

55. Referring to claim 15, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the set of one or more illegal states or state

transitions comprises a state associated with an authorization violation or an authentication forgery (e.g., col., 5).

56. Referring to claim 16, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the set of one or more undesirable states or state transitions comprises a state associated with a sudden quality of service degradation or a violation of a service level agreement (e.g., col., 10).

57. Referring to claim 17, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses examining multiple notifications to deduce one or more trends regarding the network (e.g., col., 5).

58. Referring to claim 18, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the step of examining multiple notifications comprises examining notifications for stable-behavior in a threshold value for a particular trend (e.g. col., 9).

59. Referring to claim 19, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the step of examining multiple notifications comprises examining notifications for increases or decreases in a threshold value for a particular trend (e.g., col., 9).

60. Referring to claim 20, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses computer-based system for capturing behavior for network components and for interactions between components (e.g., col., 4), the system comprising: one or more network components, each network component configured to spontaneously generate notifications when specified states and state transitions occur involving the network component (e.g., col., 5), wherein the specified state and state transitions include one or more composite state transitions, each of said composite state transition comprising multiple state transitions (e.g., col., 9) and a network management system configured to receive said spontaneously generated notifications (e.g., col., 9).

61. Referring to claim 21, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses an agent configured to detect the generation of notifications by the network components, and configured to report detected notifications to said network management system (e.g., col., 10).

62. Referring to claim 22, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses a state table configured to store said specified states and state transitions, including composite state transitions (e.g., col., 9).

63. Referring to claim 23, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the state table is in a network management system (e.g., col., 10).

64. Referring to claim 24, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the state table is in one of the one or more network components (e.g., col., 10).

65. Referring to claim 25, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the agent is further configured to examine one or more conditions of one or more network components and to query the state table storing said specified states and state transitions to determine whether the one or more conditions represents an illegal or undesirable state or state transition (e.g., col., 9).

66. Referring to claim 27, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses a computer-based system for capturing illegal and undesired behavior for network components and for interactions between components (e.g., col., 4)comprising: one or more network components (e.g., col., 4); an agent configured to examine said network components to determine whether specified states or state transitions, including composite state transitions, have occurred (e.g., col., 5), wherein the agent is configured to generate notifications upon a determination that a specified state or state transition has occurred, wherein the agent is configured to report detected notifications to a network management system (e.g., col., 5); wherein each of said composite state transition comprises multiple state transitions; wherein the specified states and state transitions comprise (1) a set of undesirable states or state transitions associated with undesirable behavior (e.g., col., 9) and (2) a set of illegal states or

state transitions associated with illegal behavior (e.g., col., 9), said set of illegal states and state transitions being different than said set of undesirable states or state transitions (e.g., col., 9); and said network management system configured to receive reports of said generated notifications (e.g., col., 9).

67. Referring to claim 28, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses a state table configured to store said specified states and state transitions, including composite state transitions (e.g., col., 10).

68. Referring to claim 29, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses computer-readable storage medium carrying one or more sequences of instructions for capturing behavior for network components and for interactions between components (e.g., col., 4), which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of: accessing first data that defines one or more states and state transitions for a particular component or interaction between a particular two or more components (e.g., col., 4), wherein the first data defines at least one composite state transition, each of said composite state transition comprising multiple state transitions (e.g., col., 4)and in response to the particular component or interaction between the particular two or more components entering a particular state or state transition generating a notification corresponding to the particular state or state transition (e.g., col., 9), wherein the particular state or state transition is one of the one or more states and state transitions (e.g., col., 9).

69. Referring to claim 30, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the one or more states are specified based on thresholds (e.g., col., 5).

70. Referring to claim 31, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein said notifications are events (e.g., col., 10).

71. Referring to claim 32, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the particular component or interaction between the particular two or more components is a component (e.g., col., 9), and wherein the step of generating the notification comprises generating the notification by the component (e.g., col., 9).

72. Referring to claim 33, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the particular component or interaction between the particular two or more components is an interaction between the particular two or more components (e.g., col., 10), and wherein the notification is generated by at least one of the particular two or more components (e.g., col., 10).

73. Referring to claim 34, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the instructions for carrying out the step of

creating and storing first information further comprise instructions for carrying out the step of: reporting the notification to a network management system (e.g., col., 9).

74. Referring to claim 35, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the steps of: detecting that the particular component or interaction between the particular two or more components has entered the particular state or state transition (e.g., col., 10); and wherein said notification is generated in response to said step of detecting (e.g., col., 10).

75. Referring to claim 36, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the step of detecting is performed by an agent, said agent being different than the particular component (e.g., col., 5).

76. Referring to claim 38, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of: polling the particular component or the particular two or more components to determine that the particular state or state transition has occurred (e.g., col., 9).

77. Referring to claim 43, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the set of one or more illegal states or state

transitions comprises a state associated with an authorization violation or an authentication forgery (e.g., col., 5).

78. Referring to claim 44, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the set of one or more undesirable states or state transitions comprises a state associated with a sudden quality of service degradation or a violation of a service level agreement (e.g., col., 10).

79. Referring to claim 45, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of examining multiple notifications to deduce one or more trends regarding the network (e.g., col., 5).

80. Referring to claim 46, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the step of examining multiple notifications comprises examining notifications for stable-behavior in a threshold value for a particular trend (e.g., col., 10).

81. Referring to claim 47, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the step of examining multiple notifications

comprises examining notifications for increases or decreases in a threshold value for a particular trend (e.g., col.,. 10).

82. Referring to claims 48 and 54, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses accessing second data that indicates, for the particular component or interaction between the particular two or more components (e.g., col., 4), a set of one or more undesirable states or state transitions (e.g., col., 4); wherein each of said one or more undesirable states or state transitions is a state or state transition of the one or more states and state transitions that is associated with undesirable behavior (e.g., col., 10); and accessing third data that indicates, for the particular component or interaction between the particular two or more components, a set of one or more illegal states or state transitions (e.g., col., 10); wherein each of said one or more illegal states or state transitions is a state or state transition of the one or more states and state transitions that is associated with illegal behavior (e.g., col., 5); wherein the set of one or more illegal states is different from the set of one or more undesirable states (e.g., col., 5); wherein the particular state or state transition belongs to either the set of one or more undesirable states or state transitions or the set of one or more illegal states or state transitions (e.g., col., 5).

83. Referring to claim 49, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the specified states and state transitions comprise (1) a set of undesirable states or state transitions associated with undesirable behavior (e.g., col., 10) and (2) a set of illegal states or state transitions associated with illegal behavior, said set of

illegal states and state transitions being different than said set of undesirable states or state transitions (e.g., col., 10).

84. Referring to claims 50 and 55, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the first data is stored in a state table in a network management system, wherein the step of generating is performed by a component or agent separate from the network management system (e.g., col., 10).

85. Referring to claims 51 and 56, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the first data is stored in a state table in the particular component or in at least one of the two or more particular components (e.g., col., 9).

86. Referring to claims 53 and 58, Bradley-CICSO discloses the claimed limitations as rejected above. Bradley-CICSO also discloses wherein the particular state or state transition is a composite state transition (e.g., col., 5).

87. Claims 1-8,10,15-25,27-36,38 and 43-51, 53-56, 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Anandakumar et al. 6,801,532 (Hereinafter Anandakumar-TXN).

88. Referring to claim 1, Anandakumar-TXN discloses a method for capturing behavior for network components and for interactions between components comprising: accessing first data that defines one or more states and state transitions for a particular component or interaction

between a particular two or more components (e.g., figure 16, col., 14), wherein the first data defines at least one composite state transition, each of said composite state transition comprising multiple state transitions (e.g., col., 15); and in response to the particular component or interaction between the particular two or more components entering a particular state or state transition (e.g., col., 15), generating a notification corresponding to the particular state or state transition, wherein the particular state or state transition is one of the one or more states and state transitions (e.g., col., 19).

89. Referring to claim 2, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the one or more states are specified based on thresholds (e.g., col., 20).

90. Referring to claim 3, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the notification is an event (e.g., col., 15).

91. Referring to claim 4, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the particular component or interaction between the particular two or more components is a component (e.g., col., 20), and wherein the step of generating the notification comprises generating the notification by the component (e.g., col., 20).

92. Referring to claim 5, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the particular component or interaction between the particular two or more components is an interaction between the particular two or more components (e.g., col., 20), and wherein the notification is generated by at least one of the particular two or more components (e.g., col., 20).

93. Referring to claim 6, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses reporting the notification to a network management system (e.g., col., 14).

94. Referring to claim 7, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses detecting that the particular component or interaction between the particular two or more components has entered the particular state or state transition (e.g., col., 15); and wherein said notification is generated in response to said step of detecting (e.g., col., 15).

95. Referring to claim 8, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein, the step of detecting is performed by an agent, said agent being different than the particular component (e.g., col., 19).

96. Referring to claim 10, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses polling the particular component or the particular two

or more components to determine that the particular state or state transition has occurred (e.g., col., 12).

97. Referring to claim 15, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the set of one or more illegal states or state transitions comprises a state associated with an authorization violation or an authentication forgery (e.g., col., 15).

98. Referring to claim 16, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the set of one or more undesirable states or state transitions comprises a state associated with a sudden quality of service degradation or a violation of a service level agreement (e.g., col., 20).

99. Referring to claim 17, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses examining multiple notifications to deduce one or more trends regarding the network (e.g., col., 15).

100. Referring to claim 18, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the step of examining multiple notifications comprises examining notifications for stable-behavior in a threshold value for a particular trend (e.g. col., 19).

101. Referring to claim 19, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the step of examining multiple notifications comprises examining notifications for increases or decreases in a threshold value for a particular trend (e.g., col., 19).

102. Referring to claim 20, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses computer-based system for capturing behavior for network components and for interactions between components (e.g., col., 14), the system comprising: one or more network components, each network component configured to spontaneously generate notifications when specified states and state transitions occur involving the network component (e.g., col., 15), wherein the specified state and state transitions include one or more composite state transitions, each of said composite state transition comprising multiple state transitions (e.g., col., 19) and a network management system configured to receive said spontaneously generated notifications (e.g., col., 19).

103. Referring to claim 21, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses an agent configured to detect the generation of notifications by the network components, and configured to report detected notifications to said network management system (e.g., col., 20).

104. Referring to claim 22, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses a state table configured to store said specified states and state transitions, including composite state transitions (e.g., col., 19).

105. Referring to claim 23, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the state table is in a network management system (e.g., col., 20).

106. Referring to claim 24, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the state table is in one of the one or more network components (e.g., col., 20).

107. Referring to claim 25, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the agent is further configured to examine one or more conditions of one or more network components and to query the state table storing said specified states and state transitions to determine whether the one or more conditions represents an illegal or undesirable state or state transition (e.g., col., 19).

108. Referring to claim 27, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses a computer-based system for capturing illegal and undesired behavior for network components and for interactions between components (e.g., col., 14)comprising: one or more network components (e.g., col., 14); an agent configured to examine

said network components to determine whether specified states or state transitions, including composite state transitions, have occurred (e.g., col., 15), wherein the agent is configured to generate notifications upon a determination that a specified state or state transition has occurred, wherein the agent is configured to report detected notifications to a network management system (e.g., col., 15); wherein each of said composite state transition comprises multiple state transitions; wherein the specified states and state transitions comprise (1) a set of undesirable states or state transitions associated with undesirable behavior (e.g., col., 19) and (2) a set of illegal states or state transitions associated with illegal behavior (e.g., col., 19), said set of illegal states and state transitions being different than said set of undesirable states or state transitions (e.g., col., 19); and said network management system configured to receive reports of said generated notifications (e.g., col., 19).

109. Referring to claim 28, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses a state table configured to store said specified states and state transitions, including composite state transitions (e.g., col., 20).

110. Referring to claim 29, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses computer-readable storage medium carrying one or more sequences of instructions for capturing behavior for network components and for interactions between components (e.g., col., 14), which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of: accessing first data that defines one or more states and state transitions for a particular component or interaction

between a particular two or more components (e.g., col., 14), wherein the first data defines at least one composite state transition, each of said composite state transition comprising multiple state transitions (e.g., col., 14)and in response to the particular component or interaction between the particular two or more components entering a particular state or state transition generating a notification corresponding to the particular state or state transition (e.g., col., 19), wherein the particular state or state transition is one of the one or more states and state transitions (e.g., col., 19).

111. Referring to claim 30, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the one or more states are specified based on thresholds (e.g., col., 15).

112. Referring to claim 31, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein said notifications are events (e.g., col., 20).

113. Referring to claim 32, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the particular component or interaction between the particular two or more components is a component (e.g., col., 19), and wherein the step of generating the notification comprises generating the notification by the component (e.g., col., 19).

114. Referring to claim 33, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the particular component or interaction between the particular two or more components is an interaction between the particular two or more components (e.g., col., 20), and wherein the notification is generated by at least one of the particular two or more components (e.g., col., 20).

115. Referring to claim 34, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of: reporting the notification to a network management system (e.g., col., 19).

116. Referring to claim 35, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the steps of: detecting that the particular component or interaction between the particular two or more components has entered the particular state or state transition (e.g., col., 20); and wherein said notification is generated in response to said step of detecting (e.g., col., 20).

117. Referring to claim 36, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the step of detecting is performed by an agent, said agent being different than the particular component (e.g., col., 15).

118. Referring to claim 38, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of: polling the particular component or the particular two or more components to determine that the particular state or state transition has occurred (e.g., col., 19).

119. Referring to claim 43, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the set of one or more illegal states or state transitions comprises a state associated with an authorization violation or an authentication forgery (e.g., col., 15).

120. Referring to claim 44, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the set of one or more undesirable states or state transitions comprises a state associated with a sudden quality of service degradation or a violation of a service level agreement (e.g., col., 20).

121. Referring to claim 45, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of examining multiple notifications to deduce one or more trends regarding the network (e.g., col., 15).

122. Referring to claim 46, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the step of examining multiple notifications comprises examining notifications for stable-behavior in a threshold value for a particular trend (e.g., col., 20).

123. Referring to claim 47, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the step of examining multiple notifications comprises examining notifications for increases or decreases in a threshold value for a particular trend (e.g., col.,. 20).

124. Referring to claims 48 and 54, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses accessing second data that indicates, for the particular component or interaction between the particular two or more components (e.g., col., 14), a set of one or more undesirable states or state transitions (e.g., col., 14); wherein each of said one or more undesirable states or state transitions is a state or state transition of the one or more states and state transitions that is associated with undesirable behavior (e.g., col., 20); and accessing third data that indicates, for the particular component or interaction between the particular two or more components, a set of one or more illegal states or state transitions (e.g., col., 20); wherein each of said one or more illegal states or state transitions is a state or state transition of the one or more states and state transitions that is associated with illegal behavior (e.g., col., 15); wherein the set of one or more illegal states is different from the set of one or more undesirable states (e.g., col., 15); wherein the particular state or state transition belongs to

either the set of one or more undesirable states or state transitions or the set of one or more illegal states or state transitions (e.g., col., 15).

125. Referring to claim 49, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the specified states and state transitions comprise (1) a set of undesirable states or state transitions associated with undesirable behavior (e.g., col., 20) and (2) a set of illegal states or state transitions associated with illegal behavior, said set of illegal states and state transitions being different than said set of undesirable states or state transitions (e.g., col., 20).

126. Referring to claims 50 and 55, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the first data is stored in a state table in a network management system, wherein the step of generating is performed by a component or agent separate from the network management system (e.g., col., 20).

127. Referring to claims 51 and 56, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the first data is stored in a state table in the particular component or in at least one of the two or more particular components (e.g., col., 19).

128. Referring to claims 53 and 58, Anandakumar-TXN discloses the claimed limitations as rejected above. Anandakumar-TXN also discloses wherein the particular state or state transition is a composite state transition (e.g., col., 15).

129. Claims 1-8,10,15-25,27-36,38 and 43-51, 53-56, 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin et al. 6,405,250 (Hereinafter Lin-Lucent).

130. Referring to claim 1, Lin-Lucent discloses a method for capturing behavior for network components and for interactions between components comprising: accessing first data that defines one or more states and state transitions for a particular component or interaction between a particular two or more components (e.g., figure 5col., 3), wherein the first data defines at least one composite state transition, each of said composite state transition comprising multiple state transitions (e.g., col., 4); and in response to the particular component or interaction between the particular two or more components entering a particular state or state transition (e.g., col., 4), generating a notification corresponding to the particular state or state transition, wherein the particular state or state transition is one of the one or more states and state transitions (e.g., col., 5).

131. Referring to claim 2, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the one or more states are specified based on thresholds (e.g., col., 6).

132. Referring to claim 3, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the notification is an event (e.g., col., 4).

133. Referring to claim 4, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the particular component or interaction between the particular two or more components is a component (e.g., col., 8), and wherein the step of generating the notification comprises generating the notification by the component (e.g., col., 8).

134. Referring to claim 5, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the particular component or interaction between the particular two or more components is an interaction between the particular two or more components (e.g., col., 8), and wherein the notification is generated by at least one of the particular two or more components (e.g., col., 8).

135. Referring to claim 6, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses reporting the notification to a network management system (e.g., col., 3).

136. Referring to claim 7, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses detecting that the particular component or interaction between the particular two or more components has entered the particular state or state transition (e.g., col., 4); and wherein said notification is generated in response to said step of detecting (e.g., col., 4).

137. Referring to claim 8, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein, the step of detecting is performed by an agent, said agent being different than the particular component (e.g., col., 5).

138. Referring to claim 10, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses polling the particular component or the particular two or more components to determine that the particular state or state transition has occurred (e.g., col., 9).

139. Referring to claim 15, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the set of one or more illegal states or state transitions comprises a state associated with an authorization violation or an authentication forgery (e.g., col., 4).

140. Referring to claim 16, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the set of one or more undesirable states or state transitions comprises a state associated with a sudden quality of service degradation or a violation of a service level agreement (e.g., col., 8).

141. Referring to claim 17, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses examining multiple notifications to deduce one or more trends regarding the network (e.g., col., 4).

142. Referring to claim 18, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the step of examining multiple notifications comprises examining notifications for stable-behavior in a threshold value for a particular trend (e.g. col., 5).

143. Referring to claim 19, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the step of examining multiple notifications comprises examining notifications for increases or decreases in a threshold value for a particular trend (e.g., col., 5).

144. Referring to claim 20, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses computer-based system for capturing behavior for network components and for interactions between components (e.g., col., 3), the system comprising: one or more network components, each network component configured to spontaneously generate notifications when specified states and state transitions occur involving the network component (e.g., col., 4), wherein the specified state and state transitions include one or more composite state transitions, each of said composite state transition comprising multiple state transitions (e.g., col., 5) and a network management system configured to receive said spontaneously generated notifications (e.g., col., 5).

145. Referring to claim 21, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses an agent configured to detect the generation of notifications by the

network components, and configured to report detected notifications to said network management system (e.g., col., 8).

146. Referring to claim 22, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses a state table configured to store said specified states and state transitions, including composite state transitions (e.g., col., 5).

147. Referring to claim 23, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the state table is in a network management system (e.g., col., 6).

148. Referring to claim 24, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the state table is in one of the one or more network components (e.g., col., 8).

149. Referring to claim 25, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the agent is further configured to examine one or more conditions of one or more network components and to query the state table storing said specified states and state transitions to determine whether the one or more conditions represents an illegal or undesirable state or state transition (e.g., col., 5).

150. Referring to claim 27, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses a computer-based system for capturing illegal and undesired behavior for network components and for interactions between components (e.g., col., 3)comprising: one or more network components (e.g., col., 3); an agent configured to examine said network components to determine whether specified states or state transitions, including composite state transitions, have occurred (e.g., col., 4), wherein the agent is configured to generate notifications upon a determination that a specified state or state transition has occurred, wherein the agent is configured to report detected notifications to a network management system (e.g., col., 4); wherein each of said composite state transition comprises multiple state transitions; wherein the specified states and state transitions comprise (1) a set of undesirable states or state transitions associated with undesirable behavior (e.g., col., 5) and (2) a set of illegal states or state transitions associated with illegal behavior (e.g., col., 5), said set of illegal states and state transitions being different than said set of undesirable states or state transitions (e.g., col., 5); and said network management system configured to receive reports of said generated notifications (e.g., col., 5).

151. Referring to claim 28, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses a state table configured to store said specified states and state transitions, including composite state transitions (e.g., col., 8).

152. Referring to claim 29, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses computer-readable storage medium carrying one or more sequences of

instructions for capturing behavior for network components and for interactions between components (e.g., col., 3), which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of: accessing first data that defines one or more states and state transitions for a particular component or interaction between a particular two or more components (e.g., col., 3), wherein the first data defines at least one composite state transition, each of said composite state transition comprising multiple state transitions (e.g., col., 3)and in response to the particular component or interaction between the particular two or more components entering a particular state or state transition generating a notification corresponding to the particular state or state transition (e.g., col., 5), wherein the particular state or state transition is one of the one or more states and state transitions (e.g., col., 5).

153. Referring to claim 30, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the one or more states are specified based on thresholds (e.g., col., 4).

154. Referring to claim 31, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein said notifications are events (e.g., col., 8).

155. Referring to claim 32, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the particular component or interaction between the particular two or more components is a component (e.g., col., 5), and wherein the step of generating the notification comprises generating the notification by the component (e.g., col., 5).

156. Referring to claim 33, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the particular component or interaction between the particular two or more components is an interaction between the particular two or more components (e.g., col., 8), and wherein the notification is generated by at least one of the particular two or more components (e.g., col., 8).

157. Referring to claim 34, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of: reporting the notification to a network management system (e.g., col., 5).

158. Referring to claim 35, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the steps of: detecting that the particular component or interaction between the particular two or more components has entered the particular state or state transition (e.g., col., 8); and wherein said notification is generated in response to said step of detecting (e.g., col., 8).

159. Referring to claim 36, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the step of detecting is performed by an agent, said agent being different than the particular component (e.g., col., 4).

160. Referring to claim 38, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of: polling the particular component or the particular two or more components to determine that the particular state or state transition has occurred (e.g., col., 5).

161. Referring to claim 43, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the set of one or more illegal states or state transitions comprises a state associated with an authorization violation or an authentication forgery (e.g., col., 4).

162. Referring to claim 44, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the set of one or more undesirable states or state transitions comprises a state associated with a sudden quality of service degradation or a violation of a service level agreement (e.g., col., 8).

163. Referring to claim 45, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the instructions for carrying out the step of creating and storing first information further comprise instructions for carrying out the step of examining multiple notifications to deduce one or more trends regarding the network (e.g., col., 4).

164. Referring to claim 46, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the step of examining multiple notifications comprises examining notifications for stable-behavior in a threshold value for a particular trend (e.g., col., 8).

165. Referring to claim 47, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the step of examining multiple notifications comprises examining notifications for increases or decreases in a threshold value for a particular trend (e.g., col., 8).

166. Referring to claims 48 and 54, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses accessing second data that indicates, for the particular component or interaction between the particular two or more components (e.g., col., 3), a set of one or more undesirable states or state transitions (e.g., col., 3); wherein each of said one or more undesirable states or state transitions is a state or state transition of the one or more states and state transitions that is associated with undesirable behavior (e.g., col., 6); and accessing third data that indicates, for the particular component or interaction between the particular two or more components, a set of one or more illegal states or state transitions (e.g., col., 6); wherein each of said one or more illegal states or state transitions is a state or state transition of the one or more states and state transitions that is associated with illegal behavior (e.g., col., 4); wherein the set of one or more illegal states is different from the set of one or more undesirable states (e.g., col., 4); wherein the particular state or state transition belongs to either the set of one or more

undesirable states or state transitions or the set of one or more illegal states or state transitions (e.g., col., 4).

167. Referring to claim 49, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the specified states and state transitions comprise (1) a set of undesirable states or state transitions associated with undesirable behavior (e.g., col., 8) and (2) a set of illegal states or state transitions associated with illegal behavior, said set of illegal states and state transitions being different than said set of undesirable states or state transitions (e.g., col., 8).

168. Referring to claims 50 and 55, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the first data is stored in a state table in a network management system, wherein the step of generating is performed by a component or agent separate from the network management system (e.g., col., 8).

169. Referring to claims 51 and 56, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the first data is stored in a state table in the particular component or in at least one of the two or more particular components (e.g., col., 5).

170. Referring to claims 53 and 58, Lin-Lucent discloses the claimed limitations as rejected above. Lin-Lucent also discloses wherein the particular state or state transition is a composite state transition (e.g., col., 4).

Response to Arguments

171. Applicant's arguments with respect to the amended claims dated 2/22/2008 have been considered but are moot in view of the new ground(s) of rejection (the claims are amended over the claims dated 09/24/2007 that were rejected under the prior arts of the office action dated 12/12/2007).

Allowable Subject Matter

172. New claims 52 and 57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

In order to expedite the prosecution of this case, multiple references are used for the rejections to demonstrate that several references disclose the claimed subject matter of the claims.

Examiner has cited particular columns and line numbers and/or paragraphs and/or sections and/or page numbers in the reference(s) as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety, as potentially teaching, all or part of the

claimed invention, as well as the context of the passage, as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Haresh N. Patel/

Primary Examiner, Art Unit 2154

5/25/2008